

CLAIM AMENDMENTS

1-49. (Cancelled)

50. (New) A computer-implemented method for generating a schedule for a project, the method comprising:

providing tasks of the project, a task specifying one or more resources that are to be used to complete the task, at least one task specifying multiple resources, a resource having a duration;

automatically dividing tasks into assignments, an assignment being a portion of a task that can be completed using a single resource; and

scheduling the tasks by, for the assignments of a task,

determining a time when the resource of the assignment is available for the duration of the resource; and

scheduling the assignment to be performed at the determined time

such that the assignments of a task are scheduled separately.

51. (New) The method of claim 50 wherein the scheduling of the tasks includes: providing priorities for the tasks; and

scheduling the assignments of a high priority task before scheduling the assignments of a low priority task.

52. (New) The method of claim 50 wherein the scheduling of the tasks includes: providing priorities for the tasks;

setting a priority of assignments based on the priority of their tasks; and

adjusting the priority of assignments based on availability of the resources of the assignments; and

scheduling the assignments in adjusted priority order.

53. (New) The method of claim 50 wherein the scheduling of the tasks includes: providing a specification of dependencies between tasks; and scheduling the assignments of independent tasks before the assignments of dependent tasks.
54. (New) The method of claim 50 wherein the scheduling of the tasks includes: providing a specification of dependencies between tasks; and scheduling the assignments of tasks in dependency order of the tasks.
55. (New) The method of claim 50 wherein the scheduling of the tasks includes: providing a time constraint of a task; and scheduling the assignments of tasks so that the time constraint of the task is satisfied.
56. (New) The method of claim 50 wherein the scheduling of the tasks is performed on a resource-by-resource basis.
57. (New) The method of claim 56 including scheduling the assignments of a resource in order of priority of the assignments.
58. (New) The method of claim 50 wherein the scheduling of the assignments of tasks schedules assignments to satisfy start-on constraints before satisfying must-finish-by constraints.

59. (New) A computer-readable medium containing instruction for controlling a computer system to generate a schedule for a project having tasks, at least one task using multiple resources, by method comprising:

automatically dividing the tasks of the project into assignments, an assignment being a portion of a task that can be completed using a single resource, each assignment having a duration; and
scheduling assignments of the tasks separately by,
determining a time when the resource of an assignment is available for the duration; and
setting the time that the assignment is to be performed to the determined time.

60. (New) The computer-readable medium of claim 59 wherein the assignments of high priority tasks are scheduled before the assignments of low priority tasks.

61. (New) The computer-readable medium of claim 59 wherein task have priorities and the scheduling of the assignments includes:

setting a priority of an assignment based on the priority of its task; and
adjusting the priority of the assignment based on availability of the resource of the assignment; and
scheduling the assignment based on the priority of the assignment.

62. (New) The computer-readable medium of claim 59 wherein tasks have dependencies and wherein the assignments of independent tasks are scheduled before the assignments of dependent tasks.

63. (New) The computer-readable medium of claim 59 wherein tasks have dependencies and wherein the assignments are scheduled in dependency order.

64. (New) The computer-readable medium of claim 59 wherein a task has a time constraint and wherein the assignments are scheduled so that the time constraint of the task is satisfied.

65. (New) The computer-readable medium of claim 59 wherein the scheduling is performed on a resource-by-resource basis.

66. (New) The computer-readable medium of claim 65 including scheduling the assignments of a resource in order of priority of the assignments.

67. (New) The computer-readable medium of claim 59 wherein the scheduling the assignments of tasks schedules assignments to satisfy start-on constraints before satisfying must-finish-by constraints.

68. (New) A computer system generating a schedule for a project having tasks, the system comprising:

- a component that automatically divides the tasks of the project into assignments, an assignment being a portion of a task that can be completed using a single resource, each assignment having a duration, at least one task having multiple assignments; and

- a component that determines a time when the resource of an assignment is available for the duration and sets the time that the assignment is to be performed to the determined time.

69. (New) The computer system of claim 68 wherein the assignments of high priority tasks are scheduled to be performed before performing the assignments of low priority tasks.

70. (New) The computer system of claim 68 wherein tasks have priorities and priorities of assignments are set based on the priority of their tasks and availability of the resources of the assignments.

71. (New) The computer system of claim 68 wherein tasks have dependencies and wherein the assignments of independent tasks are scheduled before the assignments of dependent tasks.